THOM and RAPER

A MANUAL of the ASPERGILLI

Thorough Working Knowledge

The manual provides the mycologist and microbiologist with a means for identifying and interpreting any Aspergillus as it is isolated from nature, thus opening to him the entire literature. Every form that is found in the literature is enumerated and its proper allocation is indicated.

A summary outline of the exact observations to be made in describing an Aspergillus sets forth the complexities in the specific combinations of these characters found in the examination of moldy material and in the isolated colonies of individual strains. A complete index quickly leads to the information you are looking for.

573 pp.

315 illus. in 76 figs.

\$7.00

The Williams & Wilkins Co. Mt. Royal & Guilford Aves • Baltimore 2, Md.

INDOLE NITRITE MEDIUM

For identification of aerobes, and facultative and strict anaerobes by means of *indole* and *nitrate* reduction tests

Write for Folder ≥ 155

BALTIMORE BIOLOGICAL LABORATORY, INC.

1640 Gorsuch Avenue Baltimore 18, Md.

SERVALL

ANGLE CENTRIFUGES

Ask for Bulletin L-31 with complete data on all models



With safety design self-centering device and dynamical balance, 13,000 r.p.m. $20,000 \times G$, Cap. $8 \times 50cc$ or 15cc tubes.

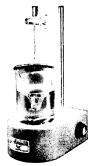
NEW TYPE SS-2 VACUUM CENTRIFUGE 17,000 r.p.m. $50,000 \times G$. Capacity $16 \times 50 cc$ or 15 cc tubes



STERLING AUTOMATIC

HAND PIPETTES

Dispense accurately, at a set speed, predetermined amounts of 0.1 ec to 10.0 ec. Easy to Operate—Time Saving



SERVAL

Magnetic Stirrer

Ask for Bulletin L-34

For stirring in open vessels or in closed systems under any pressure or under sterile conditions. Makes possible central rotation with vortex for-

mation, epicyclic motion without vortex, simultaneous stirring in several small containers, etc.

Manufacturer and Distributor:

IVAN SORVALL, Inc.
210 FIFTH AVE. - NEW YORK 10, N.Y.



Size 1 Model SBV

Size 2 Model V

Two New Centrifuge Models

HE New International Size 1 Model SBV and Size 2 Model V Centrifuges embody the many time-proven features found in their predecessors—the Size 1 Type SB and Size 2 machines—and in addition incorporate important engineering improvements. A transformer-type speed controller replaces the resistance rheostat heretofore used and the Centrifuges are now shipped to you mounted on a permanently attached sub-base equipped with casters.

Speed Controller

Stepless, uniform speed control throughout the entire range is achieved and troublesome heating of — and heat radiation from — the controller is eliminated. Controller and two-hour automatic timer are mounted in an attractive enclosing cabinet conveniently located on the side of the Centrifuge steel guard.

Sub-Base Mounting

No assembly of any kind is necessary. No separate portable stand to bother with. Simply uncrate the completely assembled unit, wheel it to the electric outlet and plug it in. Specially designed vibration dampeners, incorporated in the sub-base, provide maximum absorption of horizontal and vertical vibration and prevent their transmission to the floor of the laboratory.

Accessories

All interchangeable heads, shields, cups, and attachments listed for the discontinued SB and Size 2 machines fit the new models. Thus the Model SBV and Model 2V offer the same versatility and adaptability to your requirements. Send today for descriptive Bulletins V-1 and V-2 containing complete details.

INTERNATIONAL EQUIPMENT COMPANY

1284 SOLDIERS FIELD ROAD, BOSTON 35, MASS.



PEPTONES AND HYDROLYSATES

for Microbiological Culture Media

Difco peptones and hydrolysates are prepared to meet the diversified nutritional and biochemical requirements of microorganisms. A single peptone cannot provide the essential nitrogenous nutriments for all cultural and metabolic processes. Difco peptones and hydrolysates have been developed to meet the various requirements for microbiological procedures including growth, preparation of toxin and vaccines, and for the study of microbial metabolism.

- BACTO-PEPTONE is most widely used in the preparation of routine culture media. It is rich in readily available forms of nitrogen, and in a one per cent solution it is sparklingly clear with a reaction of pH7.0. Bacto-Peptone is specified in the formulae recommended in "Standard Methods of Water Analysis" of the American Public Health Association.
- BACTO-TRYPTOSE is a peptone which was originally developed for cultivation of the Brucella. A two per cent solution, as the sole source of nitrogen, is an excellent substitute for the meat infusion generally employed for propagation of the Streptococci, Pneumococci, Meningococci and other discriminative bacteria.
- PROTEOSE PEPTONE is universally used in the preparation of media for elaboration of diphtheria toxin. It is also an excellent nutriment for use in media designed for the production of other bacterial toxins such as those of scarlet fever and botulinus.
- PROTEOSE PEPTONE NO. 3 is particularly suitable for use in culture media employed for isolation and propagation of Neisseria gonorrhoeae and Corynebacterium diphtheriae.
- NEOPEPTONE is especially recommended as an ingredient of culture media for isolation and study of *Streptococci*, *Pneumococci* and Fungi. Media prepared with Neopeptone are most satisfactory for cultivation of *Streptococci* in the smooth or mucoid phase. Fungi produce typical characteristic colonies on solid media prepared with Neopeptone.

- BACTO-TRYPTONE is especially adapted for the elaboration of Indol and for use in media to detect Hydrogen Sulfide production. This peptone is recommended in "Standard Methods for the Examination of Dairy Products" of the American Public Health Association for the medium used in milk counts.
- BACTO-CASITONE is a pancreatic digest of casein recommended for use in the preparation of media for sterility testing according to standard procedures, and for the preparation of media requiring an enzymatic hydrolyzed casein. Bacto-Casitone can be used for the detection of Indol production by microorganisms, since it has a high tryptophane content.
- BACTO-CASAMINO ACIDS is an acid hydrolyzed casein originally prepared for the production of diphtheria toxin in peptone free media, and since adapted for other toxins and vaccines. Iron, copper, and other heavy metals have been removed from Bacto-Casamino Acids. This hydrolysate is excellently suited for nutritional studies of microorganisms.
- BACTO-CASAMINO ACIDS TECHNICAL is an acid hydrolyzed casein recommended for use in media where amino acids mixture are required as a source of nitrogen, and the sodium chloride content is not a limiting factor. Bacto-Casamino Acids Technical is of particular value in nutritional studies of bacteria.
- BACTO-VITAMIN FREE CASAMINO ACIDS is acid hydrolyzed casein, free from vitamins. It is recommended for the preparation of media for microbiological assay of vitamins and tryptophane. This hydrolysate is a valuable aid in studies of growth requirements of microorganisms.

Specify "DIFCO"

DIFCO LABORATORIES

DETROIT 1, MICHIGAN